Opportunities for Data Exchange

Researchers and Funders: Tales of Challenges and Change

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BACKGROUND

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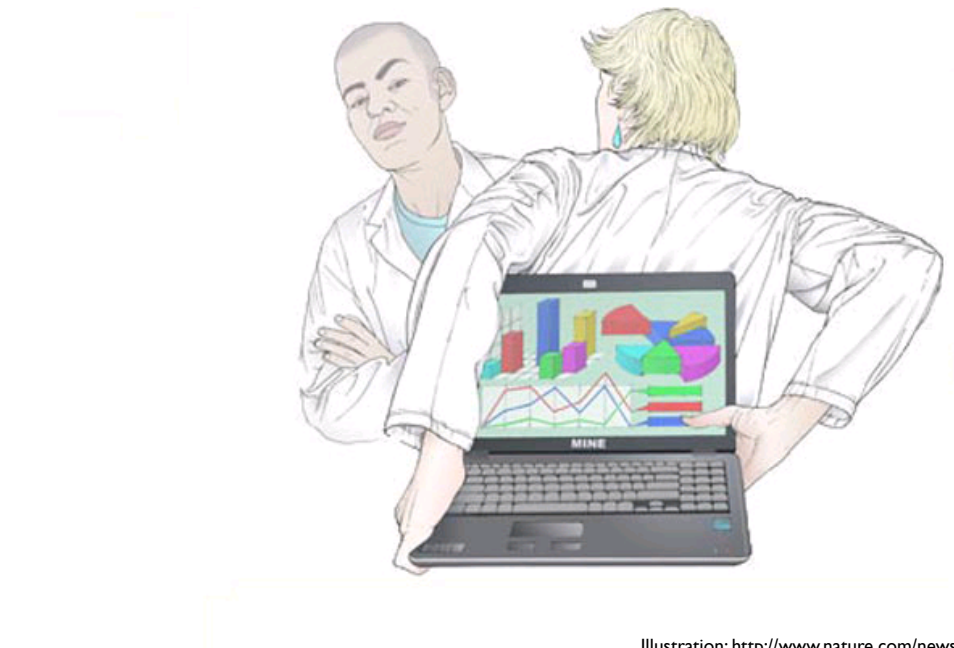Illustration: http://www.nature.com/news/specials/datasharing/index.htm

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ODE's Task

- Take a fresh look at and identify barriers and drivers to data sharing

  - by interviewing distinguished representatives of all stakeholder groups

  - by collecting "success stories", "near misses" and "honourable failures" in data sharing, re-use and preservation.

Barriers and Drivers

education

accreditation & certification

culture & attitude

legislation

quality

funding

cooperation

data sharing

policies

publishing & visibility

data flow improvements

Infrastructure

disciplines

career

efficiency

To Unravel Complexity

- Extract meaningful, to the point information and actionable advice

- **Short paper per group of stakeholders**
  - **Why should you care?**
  - **What are our credentials?**
  - **What has ODE learned from others (about you)**
  - **What you can do**

- **Advisable actions with highest impact only**
  - **For more: read full reports**

One of *ODE's* TALES

Built a data base for **deep sea biological and geochemical data** from a variety of sources.
1775 published and unpublished **data sets were collected in two years**

Learned that one may need to to **pay research groups to prepare their (existing) data** for incorporation in the ADEPD database

Karin Lochte

Vice-President Helmholtz Assoc., member German Science Council, EC-expert group on Research Infrastructures, …

Researchers: Why Care?

- **Successful examples, such as sharing data through the Worldwide Protein Data Bank, Pangaea and GenBank, ...**

  - reminds also of major differences between disciplines

- **… sharing in your discipline may be worth the effort as well.**

  - there are (many) more examples too difficult to be presented in half a paragraph: GalaxyZoo, World Met. Org.

Others' Views for Researchers

- … publishers make it clear that their own infrastructure might not be sufficient to preserve data …

  - researchers will not be aware of publishers' problems

- Data centres and libraries are willing to work with you on an incentive system … they will offer advice and training on finding, preparing and managing data.

  - researchers will not expect libraries and data centers to be active players in the areas of incentives (evaluation) and data management

What Researchers Can Do (1)

- … (everybody) depend(s) on your learned societies' or editorial boards' views … formulate rules for appropriate data management plans and best practice for sharing.

  - regarding matters of "culture", societies and editorial boards are the most authoritative entities for researchers

    - more so than their institutions!

    - If policies run counter to culture, researchers will dodge

What Researchers Can Do (2)

- … identify the best providers of data stewardship and work with them … If capable providers do not exist … you should communicate this to your research funders.

  - researchers are the most credible source of guidance for data managing institutions as well as for funding agencies

  - they must not expect to get good infrastructure without their own activity

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One of *ODE's* HYPOTHESES

"Without the infrastructure that helps scientists manage their data in a convenient and efficient way, no culture of data sharing will evolve."

Stefan Winkler-Nees
Deutsche Forschungs-Gemeinschaft (DFG)

Others' Views for Funders

- **Researchers have to balance priorities of data … sharing with pressures such as publication of papers.**

  - hint: It is **_you_** who hold researchers back form sharing by "data-blind" evaluation and funding criteria

- **… sustainable solution lies in the distributed data infrastructure …**

  - Don't even try to enforce simple solutions

What Funders Can Do

- **… promote explicit funding for data management in research grants …**

  - this is the most effective, plausible way to establish funding for data stewardship (perhaps not clear to every funder)

- **… data skills training in postgraduate courses.**

  - we encountered the skills/training question ever so often. Postgraduate education is the most obvious first step

Conclusion

- From a rich and complex source of information on data sharing

  - We extracted and prioritized challenges to researchers and funders (why care and what you can do)

  - We transferred evidence and enablers of change between disciplines and stakeholder domains

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ODE Results

- http://www.ode-project.eu/ode-outputs

- In particular:

  - Briefing sheets
  - Ten Tales

  - All interviews in "Baseline Report on Drivers and Barriers in Data Sharing"